

# ***San Joaquin Valley Unified Air Pollution Control District***

**PERMIT UNIT:** S-1394-2-1

**EXPIRATION DATE:** 4/30/2002

**EQUIPMENT DESCRIPTION:**

18 MMBTU/HR HRT BOILER PAIR, DIS# 43227-17/43228-17.

## **Permit Unit Requirements**

1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
2. Copies of all data used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3 and Kern County Rules 404 and 408] Federally Enforceable Through Title V Permit
4. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 48 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. Routine source testing for PM shall be conducted every 24 months thereafter. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Emissions of sulfur compounds from this unit shall not exceed 200 lb/ hour, calculated as SO<sub>2</sub>. Compliance with this requirement may be demonstrated by firing the unit on fuel not exceeding 1.2% sulfur by weight. [District Rule 4301, 5.2.1 and Kern County Rule 408] Federally Enforceable Through Title V Permit
6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. If compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880-71. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period [Kern County Rule 407 and District Rule 4801]. To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel

source and demonstrate that the sulfur content does not exceed 1.2% by weight. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

10. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr, calculated as Nitrogen Dioxide. [District Rules 4301, 5.2.2, 5.3, and 5.5 and Kern County Rule 408] Federally Enforceable Through Title V Permit

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 1081, 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of Kern County Rules 108.1, 404, 408, and 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. If continuous operation oxygen analyzer/controller is utilized, excess O<sub>2</sub> shall be maintained between 0.5 and 3.0%. If not utilized, excess O<sub>2</sub> shall be maintained at no less than 15%. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

14. Fuel oil preheat and atomization equipment shall be operated and maintained as intended by manufacturer. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

15. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

16. Fuel oil sulfur content shall not exceed 1.2%. [District Rules 4201, 4301, 4801 and 2080 and Kern County Rules 404, 408 and 407] Federally Enforceable Through Title V Permit

17. While firing on crude oil, the permittee shall inspect the boiler exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the equipment is performing normal, designed functions and is being operated according to standard procedures, and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. The permittee shall maintain the following records with regards to weekly visible emission/equipment inspections, while firing on crude oil: 1) date and time of inspection, 2) stack or emission point identification, 3) operational status/conditions of the boiler, 4) observed results and conclusions, 5) description of corrective actions taken to resolve any observed excessive visible emissions, 6) date and time excessive visible emissions corrected, 7) date of Method 9 test and results if corrected, and 8) name of person(s) performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. As used in this permit, the term "fuel source" shall mean fuels with similar characteristics. The operator shall maintain records of the API gravity, sulfur content and higher heating value of oils fired in this unit to determine which oils are from a common fuel source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. Oxides of nitrogen (as Nitrogen Dioxide) emission rate shall not exceed 2.3 lbm/bbl of fuel. [District Rule 4301] Federally Enforceable Through Title V Permit